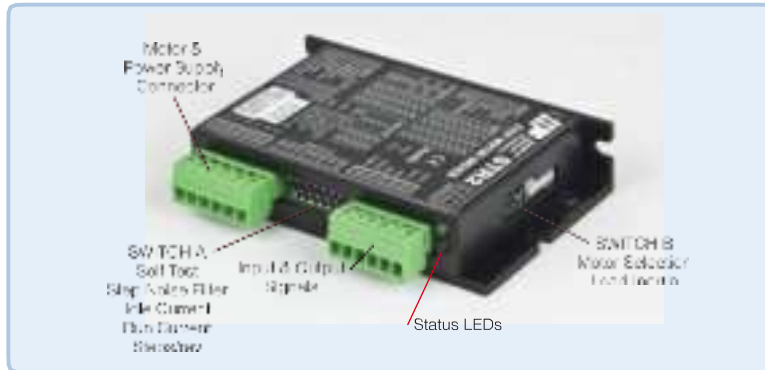


STR2 Quick Setup Guide



To begin, make sure you have the following equipment:

- A compatible stepper motor.
- A small flat blade screwdriver for tightening the connectors (included).
- A suitable DC power supply. AMP recommends the PS50A24, PS150A24 or PS320A48 available from Applied Motion.



Wiring the Drive

Step 1 - Wiring the DC supply

a. Wire the drive to the DC power source.

(do not apply power until all connections to the drive have been made)

Note, the STR2 accepts DC voltages from 12-48V.

b. Ensure a proper earth ground connection by using the screw on the left side of the chassis.

*See the STR2 Hardware Manual for more information about power supply and fuse selection.



Step 2 - Wiring the motor

Connect the drive to the motor. Four lead motors can be connected in only one way, as shown in Figure 1.

Eight lead motors can be connected in Series or Parallel, as shown in Figures 2 and 3.

If using a non-Applied Motion Products motor, please refer to your motor specs for wiring information.

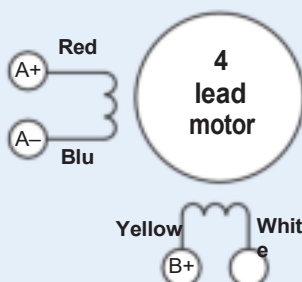


Figure 1 - 4-lead Connection

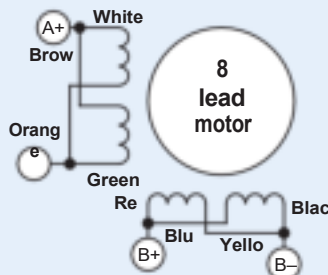


Figure 2 - 8-lead Parallel Connection

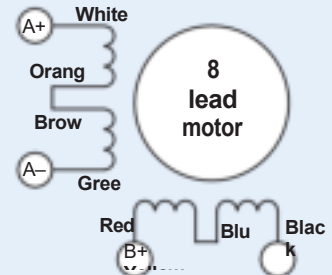


Figure 3 - 8-lead Series Connection

Setting up the Drive

NOTE: DIP switch setting changes will only take effect at power up. If changes to the DIP switches are made while power is applied, cycle power off then on for the new settings to take effect.

Step 3 - Selecting the motor

Motor selection is done with the DIP switch block on the narrow face of the drive. These switches are referred to as B1 - B3 in the *STR2 Hardware Manual*.

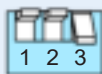
MOTOR

HT08-020/021



MOTOR

HT17-271



HT17-275

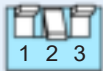
HT11-012/013



HT23-595



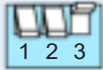
5014-842



HT23-598

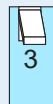
HT23-601

HT17-068



Step 4 - Selecting current

Switch A3 sets the idle current to either 50% or 90% of the selected running current.

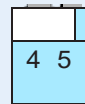


50%

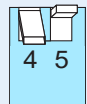


90%

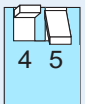
Switches A4 and A5 set the running current to 70%, 80%, 90% or 100% of the motor's rated maximum current.



100%



90%



80%



70%

Step 5 - Load inertia

Switch B4 chooses between two load inertia ratio ranges.

This information is used in the anti-resonance configuration.



5-10X



0-4X

Step 6 - Step resolution

Switches A6 - A8 specify the drive's micro-step resolution

- 200
- 200 with microstep emulation (smooth)
- 400
- 400 with microstep emulation (smooth)
- 2000
- 5000
- 12800
- 20000

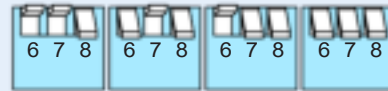


20000

12800

5000

2000



400
SMOOTH

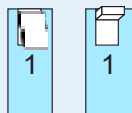
400

200
SMOOTH

200

Step 7 - Self test

The STR has a built in Self Test function. If switch A1 is moved to the ON position the drive will automatically rotate the motor back and forth, two turns in each direction. This feature can be used to confirm that the motor is correctly wired, selected and otherwise operational.



ON OFF
SELF TEST

Step 8 - User manual

A full user manual for the STR is available for download from our web site. This contains full details on setup, wiring and installation.

www.applied-motion.com/support



If you have any questions or comments, please call Applied Motion Products Customer Support: (800) 525-1609, or visit us online: www.applied-motion.com.



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